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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/087,301 | 02/27/2002 | William K. Leonard | 56912US002 | 2113 |

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EXAMINER

LAZOR, MICHELLE A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1734 | 5 |

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|---|------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/087,301 | LEONARD, WILLIAM K. |
| Period for Reply | Examiner | Art Unit |
| | Michelle A Lazor | 1734 |
| <i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i> | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | |
| - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. | | |
| - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. | | |
| - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. | | |
| - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). | | |
| - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | |
| Status | | |
| 1) <input type="checkbox"/> Responsive to communication(s) filed on _____. | | |
| 2a) <input type="checkbox"/> This action is FINAL. 2b) <input checked="" type="checkbox"/> This action is non-final. | | |
| 3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | |
| Disposition of Claims | | |
| 4) <input checked="" type="checkbox"/> Claim(s) <u>1-57</u> is/are pending in the application. | | |
| 4a) Of the above claim(s) <u>1-29 and 51-57</u> is/are withdrawn from consideration. | | |
| 5) <input type="checkbox"/> Claim(s) _____ is/are allowed. | | |
| 6) <input checked="" type="checkbox"/> Claim(s) <u>30-50</u> is/are rejected. | | |
| 7) <input type="checkbox"/> Claim(s) _____ is/are objected to. | | |
| 8) <input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement. | | |
| Application Papers | | |
| 9) <input type="checkbox"/> The specification is objected to by the Examiner. | | |
| 10) <input type="checkbox"/> The drawing(s) filed on _____ is/are: a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | |
| 11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. | | |
| If approved, corrected drawings are required in reply to this Office action. | | |
| 12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner. | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | |
| 13) <input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | |
| a) <input type="checkbox"/> All b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of: | | |
| 1. <input type="checkbox"/> Certified copies of the priority documents have been received. | | |
| 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. | | |
| 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | |
| 14) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | |
| a) <input type="checkbox"/> The translation of the foreign language provisional application has been received. | | |
| 15) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | |
| Attachment(s) | | |
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | | |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | | |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,4</u> . | | |
| 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. | | |
| 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) | | |
| 6) <input type="checkbox"/> Other: _____ | | |

DETAILED ACTION***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 22, drawn to a method, classified in class 427, subclass 355.
 - II. Claims 23 - 29, drawn to a method, classified in class 427, subclass 428.
 - III. Claims 30 - 50, drawn to an apparatus, classified in class 118, subclass 118.
 - IV. Claims 51 - 57, drawn to an apparatus, classified in class 118, subclass 244.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and III are unrelated to Inventions II and IV. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation. Inventions I and III provide a process and apparatus where a filamentous article is initially coated with an uneven coating and then passed to coating-wetted rolls that contact and re-contact the coating on the article to improve the uniformity of the coating. On the other hand, Inventions II and IV provide a process and apparatus where an uneven coating is applied to a “rotating substrate” rather than the filamentous article, then the “rotating substrate” is contacted with coating-wetted rolls that contact and re-contact the coating on the rotating substrate, and then the coating is transferred to the filamentous article. Thus, the Inventions I and III treat the coating after it has been applied to the filamentous article to be coated, while the Inventions II and IV treat the coating before it has been applied to the filamentous article.

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3. Inventions I and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process, such as coating webs or providing contact to make a coating more non-uniform.

4. Inventions II and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process, such as coating webs or providing contact to make a coating more non-uniform.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Mr. Brian Szymanski on 21 May 2003 a provisional election was made with traverse to prosecute the invention of Group III, claims 30 – 50. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1 – 29 and 51 – 57 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 30, 33, 34, and 36 – 38 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 63 – 65, 67, and 68 of copending Application No. 09757955. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are claiming a device with three or more rotating rolls or devices that can periodically contact and re-contact the coating at different positions on a substrate, wherein the periods are not periodically related; wherein the periods are selected so that the uniformity of the coating is improved; and wherein the coating station initially applies a discontinuous or uneven coating.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 30, 32, 33, 35, 42 – 45, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Von Kohorn (U.S. Patent No. 2570173).

Regarding Claims 30, 32, 33, Von Kohorn discloses a device comprising a coating station (20) that directly sprays a substantially uneven coating to at least some of the exposed portion of a filamentous article and an improvement station comprising two or more rotating rolls (21) that periodically contact and re-contact the wet coating at different positions along the length of the filamentous article (Figure; column 4, lines 4 – 20); Von Kohorn also discloses the coating station which is capable of periodically applying the coating liquid, and of changing the application period by turning the spray nozzles on and off. Thus Von Kohorn discloses all the limitations of Claims 30, 32, 33, and anticipates the claimed invention.

Regarding Claims 35, 42 – 45 and 48, Von Kohorn discloses the rolls have the same period of contact with the filamentous article, wherein the filamentous article has a direction of motion and the direction of rotation of all the rolls is the same as the direction of motion, wherein there is substantially no slippage between the rolls and the filamentous article; and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figure; column 4, lines 4 – 23). Thus Von Kohorn discloses all the limitations of Claims 35, 42 – 45 and 48, and anticipates the claimed invention.

11. Claims 30 – 33, 36 – 45, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Severini (U.S. Patent No. 2867108).

Regarding Claims 30 – 33, Severini discloses a device comprising a coating station (16) that indirectly sprays by means of a shower nozzle or drips by means of a pipe (column 4, lines

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43 – 48) a substantially uneven coating to at least some of the exposed portion of a filamentous article and an improvement station comprising two or more rotating rolls (10) (11) that periodically contact and re-contact the wet coating at different positions along the length of the filamentous article (Figures 1 and 2; column 4, lines 43 – 62 and column 5, lines 16 – 37); Severini also discloses the coating station which is capable of periodically applying the coating liquid, and of changing the application period by turning the spray nozzles on and off. Thus Severini discloses all the limitations of Claims 30 – 33, and anticipate the claimed invention.

Regarding Claims 36 – 45 and 48, Severini discloses the rolls that do not have the same period of contact with the filamentous article, wherein the rolls all have different periods of contact with the filamentous article and wherein the rotational periods of the rolls are not periodically related; wherein the filamentous article has at least 13 contacts with the rolls following application of the substantially uneven coating (Figures 1 and 2), wherein the filamentous article has a direction of motion and the direction of rotation of all the rolls is the same as the direction of motion, wherein there is substantially no slippage between the rolls and the filamentous article; and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figures 1 and 2; column 3, line 66 – column 4, line 11). Thus Severini discloses all the limitations of Claims 36 – 45 and 48, and anticipates the claimed invention.

12. Claims 30 – 34, 36, 38, 39, 42 – 46, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Guertin (U.S. Patent No. 5034250).

Regarding Claims 30 – 33, Guertin discloses a device comprising a coating station (21) that directly sprays or drips a substantially uneven coating to at least some of the exposed portion

of a filamentous article and an improvement station comprising two or more rotating rolls (10) (11) (18) that periodically contact and re-contact the wet coating at different positions along the length of the filamentous article (Figure; column 2, lines 56 – 66); Guertin also discloses the coating station which is capable of periodically applying the coating liquid, and of changing the application period by turning the spray nozzles on and off. Thus Guertin discloses all the limitations of Claims 30 – 33, and anticipate the claimed invention.

Regarding Claims 34, 36, 38, and 39, Guertin discloses at least three rolls, wherein the rolls do not have the same period of contact with filamentous article; wherein the rotational periods of the rolls are not periodically related; and wherein the filamentous article has at least five contacts with the rolls following application of the substantially uneven coating (Figure). Thus Guertin discloses all the limitations of Claims 34, 36, 38, and 39, and anticipate the claimed invention.

Regarding Claims 42 – 46 and 48, Guertin discloses the filamentous article has a direction of motion and the direction of rotation of all the rolls is the same as the direction of motion, wherein there is substantially no slippage between the rolls and the filamentous article; wherein at least one of the rolls is grooved; and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figure; column 2, line 56 – column 3, line 15). Thus Guertin discloses all the limitations of Claims 42 – 46 and 48, and anticipates the claimed invention.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 31 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Von Kohorn.

Von Korn discloses using a coating station (20). The sprayers of the coating station are considered capable of dripping an uneven coating to at least some of the exposed portion of a filamentous article. In any event, it would have been obvious to use dripping means to conserve coating material and prevent excess coating material from being wasted in the coating area by spraying.

15. Claim 31 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Guertin.

Guertin discloses using a coating station (21). The sprayers of the coating station are considered capable of dripping an uneven coating to at least some of the exposed portion of a filamentous article. In any event, it would have been obvious to use dripping means to conserve coating material and prevent excess coating material from being wasted in the coating area by spraying.

16. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guertin as applied in Claim 30 above, in view of Guillermin et al. (U.S. Patent No. 4059068).

Guertin discloses all the limitations of Claim 30, but does not specifically disclose all of the rolls to have grooves. However, Guillermin et al. teaches using grooved rolls for treatment of filamentary products (column 1, lines 37 – 43). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use grooves for all the rolls of the treatment apparatus to reduce friction (column 1, line 39) and to place the filamentary product in a desired location.

17. Claims 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guertin or Von Kohorn or Severni as applied in Claim 30 above, in view of Lundberg et al. (U.S. Patent No. 5449525).

Guertin, Von Korn, and Severni each disclose all the limitations of Claim 30, but do not specifically disclose the coating to be converted to have an average caliper from 1 to about 5 micrometers. However, one in the art would know how to coat a filamentary material to have an average caliper from 1 to about 5 micrometers as shown by Lundberg et al. (column 10, lines 41 – 44). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to coat a filamentary material to have an average caliper from 1 to about 5 micrometers since it is well known in the art how to coat in the above mentioned range of coating thicknesses.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blalock et al. (U.S. Patent No. 4586934) and Glaser (U.S. Patent No. 5259743) both disclose a device that contacts and re-contacts a wet coating at different positions along a length of a filamentous article.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 703-305-7976.

The examiner can normally be reached on Mon - Thurs 6:30 - 4:00, Fridays 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



MAL

August 8, 2003



RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
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